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IDENTIFICATION AND PROPOSED SOLUTIONS OF TRAILBIKE RELATED PROBLEMS ON THE RAVEN RANGER DISTRICT - SAM HOUSTON NATIONAL FOREST

Professional Development

for

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JIM PAGE

Recreation, Fire, Law Enforcement
and Communications, Staff Officer

National Forests in Texas
Southern Region
U.S.D.A. Forest Service

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ABSTRACT

The paper describes trailbike related problems on the Raven Ranger District of the Sam Houston National Forest. The Raven is within a two hour drive of some 3,700,000 people and an etimated 78,500 off road motorcycles. With only 2.1 percent of Texas lands in public ownership, the demand for trailbike riding opportunities on the National Forests is intense. This demand has created some serious management problems. Realistic solutions for many of these problems are presented and cooperative efforts with user groups are stressed.

INTRODUCTION

The Raven Ranger District of the Sam Houston National Forest lies 40 miles north of the city of Houston in the Gulf Coastal Plains of east Texas. The lush piney woods are recognized as unique in Texas, with so much of the state in drier deserts, prairies, and plains. The Raven has long been popular because of the varied opportunities offered. The favorable climate, the variety of vegetation and wildlife, as well as the streams, lakes, and ponds all contribute to the recreational experience (USDA Forest Service 1979).

Two other factors tend to accentuate this popularity. First, is the high population. The 1980 census indicated there were 3,740,094 people within a 100 mile radius of the Raven and 10,541,572 within a 250 mile radius. The second factor is that only 2.1 percent of the land in the state is publically owned (Motorcycle Industry Council 1980), and of that 20 percent is in the National Forest System.

Of course, with this popularity comes a host of opportunities and problems for resource managers. On the Raven, these have been addressed in at least two general land management plans (USDA Forest Service 1976, 1978) and numerous functional plans. In these plans, the oportunities and problems relating to trailbike use is often prominently mentioned and dealt with in some detail. This is as it should be because trailbike riding is extremely popular on the Raven and increasing at an average rate of 30 percent per year. In 1981, district personnel estimated they had 20,200 RVD's of motorcycle use.

Figures compiled by the motorcycle industry council indicate that Texas has the second highest number of off highway motorcycles of any state in the nation with 2.1 bikes per 100 population (Motorcycle Industry Council 1980). Based on this, and the population figures previously stated, it is estimated that there are approximately 78,500 off road bikes within 100 miles of the Raven or within a two hour drive.

Coupled with general riding on the Raven, there are four to five trailbike enduros held there each year. These are sponsored by the Trail Riders of Houston, a motorcycle club of some 400 members. These enduros vary in length from 30 to 100 miles and have as many as 450 riders in each event. They are authorized by a special use permit from the Forest Service.

Unfortunately, funding for management of the Raven's trailbike program has not been commensurate with its growth. Much good work has been done, but many problems remain and new problems continue to develop. Unless this situation is corrected, serious resource damage will be done and severe user conflicts will erupt.

This is of great concern to Forest Service managers and forest visitors, especially in light of continuing budget reductions. It was critical that the trailbike related problems on the Raven be revaluated and some realistic solutions developed.

Statement of the Problem

This paper will document major trailbike related problems on the Raven Ranger District of the Sam Houston National Forest. It will

also document proposed solutions for these problems. The problems and solutions identified will be those perceived by certain Forest Service personnel and a select segment of the public.

Hypotheses

Intense trailbike use in conjunction with limited funding on the Raven Ranger District has created significant management problems that are readily identifiable. Many of these problems were brought to light in the mid to late 70's but have not been rectified. The investigator contends that most can be solved, even with limited financing, with initiative and volunteer labor by user groups.

Delimitations and Limitations

This study only considered the Raven Ranger District of the Sam Houston, National Forest. Although a similar effort was needed on other districts, the past use and anticipated demand on the Raven was greater than other districts. Time and resources would not permit expansion of the study area, and the Raven was deemed to have the highest priority.

The number of subjects interviewed to gather data for this study was extremely limited, especially in two areas. First, it would have been highly desirable to interview a number of individuals who frequently use the Raven District for activities other than trailbike riding. They could have provided some valuable information concerning problems as viewed from their perspective. Secondly, it would also have been desirable to interview more than one trailbike rider. Although the rider interviewed was highy knowledgeable and represented a club of

some 400 members, it is probable that other riders could have provided additional pertinent data. Unfortunately, time and resources would not allow for additional interviews with subjects in either of the above groups.

Use figures documented in this study are estimates only by Raven District personnel. They are made by roughly estimating the use on key indicator days and expanding those figures appropriately. They are not based on statistically sound sampling data. Therefore, their accuracy is questionable.

In the collection of data, problems were identified and solutions suggested by the same individuals. It would have been desirable to carry this one step further in the following manner.

Once the problems and potential solutions were identified, they could have been summarized by the investigator. Then, all the subjects could have been assembled and given the opportunity to provide a consensus solution for each problem. An effort was made to do this, but time constraints on the subjects prevented them from getting together as a group.

Basic Assumptions

Two basic assumptions were made in the preparation of this paper.

The first was that the trailbike use data provided by Raven District personnel was reasonably accurate. It is also assumed that the rate of increase reflected in this data for the past six years will be the same until 1985.

The second assumption was that individuals closely associated with the Raven Ranger District, either as Forest Service employees or as visitors, would be the most knowledgeable individuals about the trailbike related problems and potential solutions for these problems.

Definitions

The following terms are defined as used in this study.

Activity Day - A unit of measure of participation in recreation activities as used in the 1980 Texas Outdoor Recreation Plan. One activity day results if any part of a day is devoted to a recreational activity by a single recreationist at a single site.

Recreation Visitor Day (RVD) - Recreation use of National Forest sites, or areas of land or water, which aggregates twelve visitor hours. It may consist of one person for twelve hours, twelve persons for one hour, or any equivalent combination of continuous or intermittent recreation use by individuals or groups. This is a basic reporting unit in the RIM system.

RIM - An electronic system of banking or storing recreation information.

Trailbike Enduro - A competative event for trail bikers in which the rider endeavors to pass specified course check points at exact pre-determined times. It is not a race.

CHAPTER II

REVIEW OF LITERATURE

A number of pieces of literature were reviewed to assist in determing the trailbike related problems on the Raven District of the Sam Houston National Forest. Numerous other documents were reviewed to determine ways of resolving the problems. The literature review had three major aspects which are as follows:

A. Literature which stated basic recreation management goals and objectives for the Raven District, the Sam Houston National Forest, and the state of Texas.

B. Literature which identified trailbike problems on the Raven District and other areas throughout the nation which have high use and similar problems.

C. Literature which identified ways of solving trailbike related problems.

The following is a brief summary of the pertinent literature reviewed. Since most of the literature both identified problems and suggested solutions, these two sections were combined.

Basic management goals and objectives were outlined in four basic documents. Broad, state wide, recreation direction was provided in the 1980 Texas Outdoor Recreation Plan (Texas Parks and Wildlife Department 1980a). This report indicated that the state would need 108 miles

of rural motorcycle trails by 1985 and that the Forest Service should provide 34 miles of this. The section of this plan for the gulf coast region noted that 26 miles should be provided on the Raven District. The document assumed a carrying capacity of 26.8 user activity days per mile of trail per day (Texas Parks and Wildlife Department 1980b).

The first general plan for the Raven reviewed was the Final Environmental Impact Statement and Unit Plan - Conroe Unit (USDA Forest Service 1976). This plan recognized soil resource damage, and conflict with other outdoor recreation pursuits as problems related to motorcycle use. It proposed three types of woods riding on National Forest land.

A. Crosscountry area - open riding on approximately 14,000 acres. Increased use of area could require implementation of permit system.

B. Designated motorcycle trails only - east and south central portion of unit. Estimated 50 miles of designated trails.

C. Organized events - designated routes by special use permit. Enduros would be restricted from sensitive areas.

D. All other areas closed to ORV use.

The plan also called for cooperation with the Trail Riders of Houston in trail location and for construction of trailhead facilities.

The Final Environmental Impact Statement and Land Management Plan - Sam Houston National Forest, Texas (USDA Forest Service 1978) considered the off road vehicle situation on the Sam Houston National Forest in moderate detail and reiterated some of the direction in the Conroe Unit Plan. It provided for three types of woods trailbike riding on the unit. They were as follows:

A. Cross country, with approximately 14,000 acres on the Raven District.

B. Designated motorcycle trails only, with 150-200 miles of trail planned throughout the Forest.

C. Organized competitive events (motorcycle enduros) - designated routes by special use permit.

D. All other areas were closed to ORV use.

(See map in Appendix B).

The plan also called for construction of parking lots for motorcyclists, set maximum noise levels, restricted ORV use to vehicles 40 inches or less in width, and required monitoring of the effects of ORV use. As did the Conroe Plan, it called for cooperation with the Trail Riders of Houston and other organized groups to select final trail locations.

Environmental impacts resulting from implementation of the plan were covered in some detail. It should be noted that the 14,000 acre cross country area established in the plan was not a "sacrifice" area. The public and the planners involved carefully considered the social and environmental impacts its establishment would have and found them to be within acceptable limits.

Finally, the Off Road Vehicle Plan, Sam Houston National Forest, Texas, provided an overview of the ORV situation and set additional direction for development and management of a trailbike system (USDA Forest Service 1979). It incorporated the Trail Riders of Houston, into

the planning and implementation process and reiterated the direction of the Sam Houston National Forest Unit Plan.

There was an abundance of literature which identified trailbike related prolems and suggested solutions. The Conroe Unit Plan, the Sam Houston Unit Plan, and the Off Road Vehicle Plan, mentioned previously pointed out many of the Raven's problems. Following is a discussion of other documents that were reviewed to identify problems and solutions.

An in service white paper prepared in the Summer of 1981 by Duane Strock, National Forests in Texas Trail Coordinator, specifically outlined several of the most prevelent ORV problems facing the Raven District. Some of the items he cited were (1) lack of funding, (2) negative attitudes of nonusers toward motorcycles and motorcyclists, (3) the need for trailhead facilities, (4) the need to better inform the visiting public of opportunities, use areas, and regulations, (5) the need to effect better control on environmentally fragile areas, and (6) a need for a positive attitude on the part of management personnel toward ORV use.

"Planning for Trailbike Recreation", (USDI Heritage Conservation and Recreation Service 1979), and "Planning for Trailbike Recreation Part II" (USDI Heritage Conservation and Recreation Service 1980), provided good collections of digests of papers presented at 14 ORV workshops held throughout the country between September 1977 and June 1980. These workshops were sponsored by the Motorcycle Industry Council and various government organizations. The papers identified a host of problems around the country and went on to give solutions developed by various individuals and groups. Many of the problems identified were not pertinent to the Raven's situation, but many were. Management - The

solution to the problems by Roland V. Emetaz and one of the papers in Part II was particulary good (Emetaz 1980). It identified a number of significant problems and outlined realistic solutions.

"A Trail Rider's Guide to the Environment" was an entertaining, easy to read user's information booklet (Bennett 1973). It itemized many environmental concerns around the nation and provides advice for solution. However, it failed to fully recognize the investments required to implement many of the solutions.

"Field Guide for Routine Recreation Trail Maintenance" published by the State of Washington, Department of Natural Resources had many ideas on bike trail maintenance (State of Washington Department of Natural Resources 1977). It was written for Pacific Northwest conditions, but many of the concepts can be used anywhere.

"Five State Approaches to Trailbike Recreation Facilities and Their Management" by Rasor, outlined various trailbike management strategies in Florida, Louisiana, California, Missouri and Washington (Rasor 1977). Many of the approaches dealt with higher development levels than contemplated on the Raven.

"Motorcycle Area Design and Location: Impacts on the Recreational Experience of Riders and Nonriders" is a paper concerning a study conducted at Tennessee Valley Authorities' recreation area Land Between The Lakes in Tennessee and Kentucky (Bury and Fillmore 1975). It analyzed some of the psychological and sociological effects of constructing motorcycle riding areas adjacent to fixed site campgrounds.

It's findings could be of value in planning trails adjacent to recreation areas, and offered some good direction applicable to the Raven's situations.

"Turkey Bay Off Road Vehicle Area at Land Between The Lakes: An Example of New Opportunities for Managers and Riders" provided a review of five years of research and experience (McEwen 1978). It offered a foundation upon which to base off road vehicle policies.

"Motorized Trails: An Introduction to Planning and Development" was a good basic planning document (Pennsylvania Trails Program, Division of Outdoor Recreation 1980). It was written so everyone could readily understand it. Resource considerations during alternative analysis were stressed. This document offered especially good guidance for clubs or organizations with limited planning guidelines.

CHAPTER III

PROCEDURES

Subjects

In order to identify trailbike related problems on the Raven Ranger District, and obtain realistic solutions to these problems, the investigator elected to obtain data from four points of view. These were the Forest Service at the Supervisor's Office level, the Forest Service at the District level, trailbike users, and non trailbike users. It was felt that knowledgeable individuals of each group could present reliable information and cover a wide spectrum of concerns.

To provide input as viewed by Forest Service officials at the Supervisor's Office level, Duane Strock was selected. He served as the Forest Trail Coordinator and had seven years of experience on the Forest. He had also spent considerable time on the Raven dealing with on the ground problems and had helped in the development of the Sam Houston Unit Plan.

To provide information from the District level, Marq Webb, the District Ranger, and Gene Hayes, the District Resource Assistant, were selected. They were the on the ground managers and were highly knowledgeable of existing problems, and opportunities for solutions.

To obtain information from a trailbiker's point of view, Chris Hardy was selected. Hardy, a long time member of the Trail Riders of Houston, served as the chairman of their committee on permanently marked

trails. As chairman of this committee, he represented the club in matters concerning trail facility needs, maintenance, and construction. He also supervised all volunteer work done by the club on the Raven District. Hardy personally used the district for trailbike riding at least once a month.

Data concerning problems and solutions as viewed by nonusers was obtained by literature review and informal discussions with Raven personnel who dealt with the public on a day to day basis. These included the District Receptionists, Carolyn Mazza, the District Law Enforcement Officer, Rory Robinson, and the District Recreation Aid, George Preston. As mentioned in limitations, it would have been desirable to interview a number of nonusers.

Collection of Data and Instrumentation

Data was collected in three structured interviews and three informal conversations. Additional data was collected from a review of the literature. In the three structured interviews, the subjects were asked, "as you view them, what are the major trailbike related problems on the Raven Ranger District". After each problem was stated, the subjects were asked to present what they considered to be realistic solutions to those problems. As the interview progressed, the investigator documented their answers.

Webb and Hayes were interviewed at their office in New Waverly, Texas on the morning of January 11, 1982. They were interviewed together and conferred with each other before presenting answers.

Hardy was interviewed on the afternoon of January 11, 1982 at the Raven District Office. After the interview, he was asked some additional questions concerning the characteristics of the club he represented.

Strock was interviewed at his office in Lufkin, Texas on the morning of January 14, 1982.

Several days prior to each interview, the subjects were told what questions would be posed, and asked to think about them.

In the three informal conversations, the subjects were asked what they thought concerned other user groups most about trailbikers on the Raven District. Their answers invariably related to complaints which they had received. They were then asked what solutions, if any, the nonusers had presented. These answers were then documented by the investigator.

The conversation with Mazza, took place in the Raven Ranger District Office on January 11, 1982. The conversations with Robinson and Preston took place on December 15, 1982, in the field on the Raven District.

Treatment of Date

As mentioned in the foregoing section, information gathered in each interview and informal conversation was recorded by the investigator in note form. It was then summarized in table form. Statements of problems and solutions of each subject group were identified in separate tables. This can be seen in Tables I - V of Appendix A.

The data was then combined by considering the number of times it had been raised or alluded to by the various subject groups. This gave the investigator an indication of the spectrum of interest in each problem. This combination and a detailed discussion of the problems and solutions were presented in Chapter IV.

From the analysis of this data, conclusions were drawn and recommendations suggested. These were presented in Chapter V.

CHAPTER IV

ANALYSIS OF DATA

General

The data collected indicated that there was a broad range in problems as viewed by the different subject groups. This can be seen in Tables I-V of Appendix A. Most, but not all, of the problems were directly related to a lack of funding. The investigator's review of the literature found that many of the same problems had been identified, or at least alluded to, in the Conroe and Sam Houston Unit Plans and the Sam Houston ORV Plan (USDA Forest Service 1976, 1978, 1979). However, some of the problems identified in these plans had at least been partially rectified, and did not surface in data gathering process.

The data also indicated that there was a significant range in solutions as viewed by the subject groups. Again, many of these solutions had been suggested in the plans mentioned above. Past solutions though, had not placed as great an emphasis on assistance from user groups.

The data shown in Tables I-V of Appendix A was combined by considering the number of times a problem had been raised or alluded to by the various subject groups. This provided the investigator with an indication of the range of interest in each problem. Some indication of the problem's importance was also gained from this. The combination and analysis of this data follows:

Problems and Solutions Identified by Three or More Subject Groups

Trail Maintenance

The need for increased efforts in trail maintenance emerged as a concern with two subject groups and was alluded to by two others. The district personnel and the Trail Riders of Houston representatives both indicated this to be a major problem. Strock indicated that signing and marking was a problem, and considered to be a part of maintenance. The nonuser group indicated that resource damage was a problem. Poor maintenance on system trails could certainly lead to resource damage and thus contribute to these concerns. Another problem relating to trail maintenance that was identified by district personnel was the need for a maintenance inventory.

Trail maintenance was also identified as a problem in the Conroe and Sam Houston Unit Plans and in the Sam Houston Off Road Vehicle Plan (USDA Forest Service 1976, 1978, 1979). The problem was not unique to the Raven, as it was mentioned prominently in literature concerning other sections of the country (Bennett 1973, Rasor 1977, USDI Heritage Conservation and Recreation Service 1979, 1980). The techniques to employ in maintenance work have been well developed and thoroughly documented in the literature (State of Washington Department of Natural Resources 1977, and The Pennsylvania Trails Program 1980). Obtaining labor and supplies with limited funding has been the real issue.

All the subjects interviewed indicated that the best solution for the maintenance problem lay in a cooperative effort between the Forest Service and user groups - primarily the Trail Riders of Houston. The

Forest Service should supply materials such as bridge timbers, signs, trail markers, etc. The Trail Riders of Houston should provide the bulk of the labor. The Forest Service should also provide labor when possible. Maintenance inventory data should be collected by both the Forest Service and Trail Riders. Once compiled, priorities could be established and maintenance performed.

Trailhead Facilities

District personnel, Strock, and the representative of the Trail Riders of Houston all mentioned that the total lack of trailhead facilities was a problem. They indicated that at least two or three facilities were needed. This problem had also been recognized earlier by Strock and in the Conroe and Sam Houston Unit Plans and the Sam Houston ORV Plan (USDA Forest Service 1976, 1978, 1979 and Strock 1981).

The solution provided in each interview indicated the Forest Service should construct these facilities with assistance from the Trail Riders of Houston in labor intensive phases of construction. This could include slash disposal, erection of barrier posts, erection of bulletin boards, etc. It was recognized that major funding allocations to the district level would be required to accomplish the needed construction.

Enforcement

The need for better enforcement of ORV related regulations was identified by Strock and the District personnel as a significant problem. Regulations developed as a result of direction by the Conroe and Sam Houston Unit Plans have been fragrantly violated causing resource damage and conflicts with other user groups. This problem was also alluded to

by the nonuser group when noise was pointed out as a problem. Violations of established noise level regulations probably had a great deal to do with this surfacing as a concern.

Forest Service personnel viewed the solution to the enforcement problem as being directly related to funding. When funding levels drop, enforcement efforts traditionally have been one of the first things cut. Strock felt that it was vital that enforcement efforts that can be funded should be conducted during high use periods and in major problem areas. He also felt that funding for enforcement would be even lower during the next several years.

Strock also stated that a requirement for individual bike and rider permits would help in enforcement. To get a permit, an individual would have his motorcycle inspected by a Forest Officer and at the same time be informed, verbally and in writing, of the policies regarding bike use on the Forest. He noted that would require additional manpower and funding, so would not be a very viable alternative at this time.

District personnel felt that another way at this problem would be to try and reduce the need for enforcement. It was felt that intensifying public information services would help achieve this. They believed that many violations occurred because of ignorance or as a result of people having been provided incorrect information.

Inexpensive handouts could be prepared which would provide simple maps and a list of the regulations pertaining to motorcycle use. These could be disseminated in conventional ways. They felt, bulletin boards could also be used as a good source for trailbike information.

Problems Identified By Two Subject Groups

Lack of Information

Interestingly, the lack of readily available information was pointed out as a separate problem by the Trail Riders of Houston representative and by Strock. No written material concerning motorcycle opportunities or regulations was available. Bikers had to get information by word of mouth from other bikers or stop by the ranger station during business hours for verbal instructions.

Strock and the representative from Trail Riders of Houston felt that the Forest Service should make written information readily available to the public. They felt that literature should provide information on trail locations and markings and list the regulations pertaining to trailbike activities. They also felt simple maps should be printed showing areas open for general cross country riding, areas open for riding on trails only, and closed areas.

This solution obviously coincides with part of the solution for the enforcement problem.

Hunter Conflict

The final problem that surfaced twice, was the conflict with hunters. This was identified by the Trail Riders of Houston representative and by nonusers. Conflicts with other user groups was also mentioned as a problem in the Conroe and Sam Houston Unit Plans (USDA Forest Service 1976, 1978). The Trail Riders of Houston representative noted that during the six week deer hunting season riders were frequently threatened, and booby traps in bike trails were not uncommon.

Hunters point out that noise and activity by bike riders significantly reduces the quality of the hunting experience. It was noted however, that some hunters use trailbikes.

Both groups agreed that the solution to this problem was to eliminate bike riding during the six week hunting season. The nonuser group felt that this should be done by Forest Service regulation. The Trail Riders of Houston representative felt it should be on a voluntary basis with each individual rider making his own decision. He noted that riders should be provided information concerning hunting season problems well before the opening day. This could be done through user group contacts and press releases.

Problems Identified By One Subject Group

Closures

The representative of the Trail Riders of Houston stated that closures of National Forest land were a major problem to him and his group. He indicated that his group had more or less accepted ones that had been made, but were strongly concerned that additional closures might be made.

He felt that it was essential that motorcycle enthusiasts remain highly involved in the land management planning process to keep this from happening. He also felt that the Forest Service shouldn't even consider additional closures.

Slash

The final problem noted by the Trail Riders of Houston representative was that on several occasions, logging slash had been left in marked motorbike trails. This slash resulted from authorized timber cutting in adjacent areas.

He felt that the solution of this problem would be for the Forest Service to require all timber sale operators to remove slash from designated trails.

Changes in Management Direction

A major problem pointed out by district personnel concerned changes in management direction at the district level. Since the Conroe Unit Plan was approved, the Raven has had three different Rangers. Each had a different philosophy toward ORV management. At least one provided direction to his employees that did not completely follow direction established in the unit plan. District personnel indicated this caused confusion among district employees and this confusion was passed on to the public.

The current Ranger felt that the solution to this problem was to follow the direction established by the unit plan and to make all district employees aware of that. He noted that any changes that might be needed could be addressed in the current land management planning process.

Additional Trails

Strock indicated that bike riders were using closed areas because only 35 miles of developed trails were available. He felt that the

direction of the Sam Houston Unit Plan should be followed and 150-200 miles of trail constructed. How this could be accomplished was the problem.

He felt that the bulk of this could be done through a cooperative effort with the Trail Riders of Houston. They could supply the needed labor and the Forest Service could supply materials. The location of the trail would be determined through a joint effort.

Impact Monitoring

The final problem mentioned by Strock was that there is a real need to monitor the impacts of trailbike use on the Raven to determine exactly what is happening so that corrective action could be taken if necessary. Strock felt that monitoring should be an interdisciplinary effort. How to accomplish this was the issue.

He noted that one solution to this problem would be for the Forest Service to fund an interdisciplinary impact monitoring effort. He recognized that with predicted funding levels, this probably could not be done. He also pointed out that it might be possible to get volunteer help from faculty and students at Texas A&M University or Stephen F. Austin University. He recommended they be contacted to determine if there might be interest in this project.

Noise

Most nonriders considered noise from motorcycles to be a major problem (Bury and Fillmore 1975, McEwen 1978, and Emetez 1980). This is frequently reitterated in the form of complaints to Forest Service personnel that deal with the public on a day to day basis.

To nonriders, the obvious solution is to prohibit motorcycles from most, if not all, National Forest land. However, as demonstrated in the public participation process for developing the Sam Houston Unit Plan, nonriders are willing to accept motorcycle use if it is restricted to certain areas and if certain maximum noise level restrictions are adhered to. Nonriders generally do not want bikes on major hiking trails or in major recreation areas. Forest Service personnel felt that nonriders would accept considerable bike use if all bikers would use good mufflers.

Soil Damage

The final problem identified by nonuser was excessive soil damage caused by trailbikes. Many references were made to ruts and gullies that they felt were caused by motorcycles.

The nonuser generally viewed the only solution to this problem to be elimination of trailbike activities.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary of Procedures and Findings

To document the major trailbike related problems on the Raven Ranger District and to determine realistic solutions for these problems, data was obtained from individuals representing four subject groups. This data was then combined in the following manner. Problems identified by three or more subject groups were placed in one section, problems identified by two subject groups were placed in a second section, and problems identified by only one subject group were placed in a third section. This provided an indication of the range of groups concerned by the problem and also an indication of the problem's importance. Suggested solutions to each problem were also indicated in each section.

The problems identified by two or more subject groups were as follows:

A. How can efforts in trail maintenance activities be increased?

B. How can two to three trailhead facilities be provided?

C. How can regulations related to trailbike activities be adequately enforced?

D. How can the public be provided with information concerning trailbike use on the Raven District?

E. How can the conflicts between trailbikers and hunters be reduced or eliminated?

The solutions presented for the first two problems (A&B) called for a cooperative effort between the Forest Service and the Trail Riders of Houston. Labor for maintenance and construction projects would be provided by the Trail Riders of Houston. Materials and supplies for these projects would be provided by the Forest Service.

Enforcement of trailbike regulations and providing public information were viewed as problems that would have to be dealt with primarily by the Forest Service. It was felt that simple information brochures could be provided rather inexpensively. These would provide a public service and could help reduce enforcement problems. Bulletin boards erected and maintained at strategic locations would also serve this purpose. Enforcement patrols should be concentrated in problem areas on high use days.

Conflict between hunters and trailbikers was identified as a problem that could be solved by prohibiting motorcycle use during deer season. Two ways of accomplishing this were suggested.

The first was for the Forest Service to close the Raven to all trailbike use during the six week deer season. The second, was to try and persuade trailbikers to voluntarily leave the Raven during hunting season. This was to be done through contacts with user groups and press releases.

Seven other problems were identified in the data gathering process by a single subject group. These problems and their suggested solutions were discussed in Chapter V.

Conclusions

Based upon the finding and within the limitations of this study, there are significant problems associated with the trailbike program on the Raven Ranger District. Many of these problems were identified in the mid to late 70's but have not been rectified.

Solutions developed in the past have assumed adequate or high funding levels. This hasn't happened and there is little likelihood of it happening in the near future. Therefore, realistic solutions must incorporate the use of volunteers to the fullest extent possible and must also assure that maximum benefits are received from every dollar spent. Many of the solutions proposed in this study do this.

Several of the solutions also indicated a need for a change in emphasis or management direction. Strong commitment by Forest Service line and staff officers can lead to these changes within a relatively short period of time.

The solutions indicated fall within the scope of the Sam Houston Unit Plan (USDA Forest Service 1978), and their environmental impacts are adequately considered therein.

Discussion and Implications

Emetez found the key to a good trailbike program and put it very well in the title to his paper - Management - The solution to the problems (Emetez 1980). Uncontrolled trailbike use will cause problems, and only an intensive management effort will solve them. This paper presents some realistic solutions for use in the management effort on the Raven. However, the investigator identified a number of obstacles that will be encountered in implementing the solutions. Several are worthy of mention here.

The first obstacle is that many land managers simply do not like trailbike use (Emetez 1980). It is therefore difficult for them to think of a trailbike program in a positive way, difficult for them to give it unbiased consideration in a decision making process, and really difficult for them to allocate funds to it during a tight budget period. It is essential that managers endeavor to treat this activity as a legitimate use of National Forest lands and make their decisions accordingly.

The second obstacle lies in obtaining adequate volunteer help for construction and maintenance projects. Although the Trail Riders of Houston have approximately 400 members, they seldom have more than 20 people show up for work projects. The leadership of the club is committed to providing a significant amount of assistance to the Raven, but getting the membership to turn out in force is difficult. It would be highly desireable if Forest Service officials could help the club leadership instill enthusiam in the general membership for trail work.

A third obstacle lies in the fact that there is a considerable difference of opinion as to how many miles of motorcycle trail are really needed on the Raven. The Texas Outdoor Recreation Plan called for 26 miles (Texas Parks and Wildlife Department 1980b), the Conroe Unit Plan called for 50 (USDA Forest Service 1976), and the Sam Houston Unit Plan called for 150-200 (USDA Forest Service 1978). District personnel felt they should adequately maintain existing trails before building new ones, and Strock felt that meeting the direction of the Sam Houston Unit Plan would reduce presure and enforcement problems on closed areas.

The mileage goals established in the Conroe and Sam Houston Unit Plans were derived in public involvement sessions during the preparation of these plans. Participants indicated that the figures were the results of compromises between various user groups, and did not reflect a detailed demand analysis. However, the objective adopted at these sessions was to provide a quality experience for trailbike riders by constructing enough trail for a man to ride at least two days and retrace little if any of his route. Since the average man can ride 80 miles a day, 160 miles would be required.

The figures shown in the Texas Outdoor Recreation Plan were developed as a result of a detailed demand analysis, but assumed a carrying capacity of 26.8 activity days per mile of trail per day. This appears to be a very high carrying capacity and not consistent with the type of recreation experience proposed by the Sam Houston Unit Plan.

Based on the Raven's current use figures, and a 30 percent increase per year, 57,700 RVD's of trailbike use would be projected for the Raven in 1985. Using a carrying capacity of two RVD's per mile of trail per day as suggested in the Sam Houston ORV Plan (USDA Forest Service 1979), one would calculate a need for 79 miles by 1985. This would provide a good one day ride.

The investigator feels this would be a reasonable target for 1985. Once reached, if resources are available, efforts could be made to expand the system to approxmately 150 miles. The investigator agrees with Raven personnel in that top priority should be placed on maintaining existing trails. There must be a commitment on the part of management concerning the amount of trail needed and then the goal pursued while maintaining existing trails.

There are a number of other obstacles relating to the solutions presented in this study. However, agressive and innovative management action can successfully deal with them as they are encountered.

Recommendations

A copy of this report should be furnished to all Forest Service line and staff personnel working with the Raven's trailbike program, including personnel at the Regional Office level. They can make their own value judgements of the problems and solutions presented.

Once this is done, a formalized management action plan should be developed. The plan should be written by the District Ranger with assistance from the Forest Supervisor's Office. Representatives of the Trail Riders of Houston should be highly involved in the plan preparation. Low funding levels should be assumed, and an economic analysis prepared covering major action items. The plan should address the problems and solutions developed in this study plus additional ones identified by involved individuals. It should also present a process for the final resolution of problems left in question in this report. Examples of this being-how to reduce or eliminate trailbike use during hunting season, and how many miles of trails are needed. The action plan should firmly establish corrective actions to be taken, dates they will be taken, and who will take them. Once completed, the plan would be submitted to the Forest Supervisor for his approval.

The approved plan would then be utilized to establish funding priorities and to provide firm direction in the work planning process. Individuals responsible for the accomplishment of action items would be held accountable for them by their supervisors.

Management is the solution to the Raven's trailbike problems. However, management requires time and money - two items in short supply within the National Forest system today. The investigator contends that innovative thinking and commitment to the trailbike program can help stretch these resources much further than previously thought possible. If this is correct, many of the Raven's long standing problems will not have to be considered again in future land management plans.

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APPENDIX A

TABLE I

Problems and Solutions as Viewed by Chris Hardy - Trail Riders of Houston

Problem

1. Actions by the Forest Service have resulted in the closure of considerable National Forest land to trailbike use. This has been fairly well accepted, but there is deep concern that additional closures may be made. How can this be prevented?

Solution

A. The Forest Service should not close any additional areas to trailbike use.

B. The Trail Riders of Houston and all other bikers should continue to be active in the land management planning process.

Problem

2. Permanently marked trails must be maintained. How should this be accomplished?

Solution

The Forest Service should provide materials and supplies for this work, and user groups should provide the labor. The Forest Service should also provide labor when possible.

Problem

3. Trailhead facilities are desperately needed. How can con-construction be accomplished?

Solution

The Forest Service should construct two or three trailhead facilities with help from user groups in labor intensive phases of construction. In order to reduce costs, toilet facilities could be provided later.

Problem

4. There have been times when logging slash has been left on permanent trails. How can this be prevented?

Solution

Logging slash should be removed from trails by timber purchasers.

Problem

5. There have been numerous instances where conflict situations have developed between riders and hunters. How can this be eliminated or at least reduced?

Solution

There is probably no realistic solution except not to ride on National Forest lands just prior to or during hunting season. This should be a voluntary choice on the part of the individual rider.

Problem

6. There is a great need for handouts, maps, brochures, etc. to adequately inform the public of trailbike opportunities and regulations. How can these be provided?

Solution

The Forest Service should provide these to the public as needed.

APPENDIX A

TABLE II

Problems and Solutions as Viewed by Raven District Personnel

Problem

1. Regulations regarding trailbike use are not being enforced, and violations are widespread. How can these violations be reduced?

Solution

A. Make literature explaining rules and regulations readily avilable to the public.

B. Obtain financing to provide enforcement patrols - especially on weekends.

Problem

2. At least two or three trailhead facilities are needed. How can they be provided?

Solution

Use available construction funds for trailhead facilities - not for construction of additional trail as has been the practice in the past. Use volunteers in labor intensive phases of construction.

Problem

3. There is no inventory of trail maintenance needs. How can an inventory be prepared?

Solution

This can be partially done by experienced individuals in the Trail Riders of Houston. The remainer can be done without excessive expense by personnel in the District and Supervisor's Office.

Problem

4. The bulk of available funds have been designated for trail construction. Very litle funding has been designated for maintenance. There is a greater need to maintain existing trails than to construct new ones. How can needed maintenance be accomplished?

Solution

The Forest Service should provide materials and supplies for this work, and user groups should supply the labor.

Problem

5. Management direction given by former rangers has not always been consistent with direction provided in approved management plans. This has been reflected in information passed along to the public. Consequently, there is confusion among district personnel and the public as to what is and is not proper. How can this be corrected?

Solution

Direction provided in approved management plans should be followed by the Ranger. District personnel should be familiar with this direction and pass it on to the public. Any management changes needed should be made in the current land management planning process.

APPENDIX A

TABLE III

Problems and Solutions as Viewed by Duane Strock - Forest Trails Coordinator

Problem

1. Regulations regarding trailbike use are not being enforced, and violations are wide spread. How can these violations be reduced?

Solution

A. As funding permits, the Forest Service should assign enforcement personnel to problem areas. Emphasis should be placed on periods of heavy use. These people could also disseminate information and provide for other visitor needs.

B. Examine the possibilities of requiring all riders to have a special National Forest riding and inspection permit. This would go a long way in ensuring that bikes are "legal" and that all riders are familiar with rules and regulations.

Problem

2. At least two or three trailhead facilities are desperately needed. How can these be provided?

Solution

The Forest Service should provide funding for construction of these facilities. User groups should provide assistance in labor intensive phases of construction.

Problem

3. Signs and trail route markings are grossly inadequate. How can this be improved?

Solution

The Forest Service should provide adequate signs and route markers. User groups should erect and maintain them.

Problem

4. Information concerning, regulations, riding areas, trail locations, etc. is not readily available to the public. How can this be provided?

Solution

A. The Forest Service should prepare and provide to the public written information concerning regulations, riding areas, trail locations, etc. Publications and brochures should not be elaborate so that printing costs could be low.

B. Bulletin boards with pertinent information should be erected and maintained at strategic locations.

Problem

5. Bikers are using closed areas because adequate trails aren't available in open areas. If a developed system of 150-200 miles was

provided, most bikers would stay out of closed areas. How can additional trails be provided?

Solution

The Forest Service should work with the Trail Riders of Houston to select new trail routes. The trails should be constructed with the club providing the bulk of the labor and the Forest Service providing materials.

Problem

6. Impacts resulting from trailbike use should be monitored. How can this be accomplished?

Solution

A. The Forest Service should provided funding to support interdiciplinary monitoring efforts. This probably will not happen in the foreseeable future.

B. Contact faculty members at Stephen F. Austin University and Texas A&M University to determine if they feel they could undertake a voluntary monitoring program.

APPENDIX A

TABLE IV

Problems and Solutions as Viewed by the Nontrail Bike User*

Problem

1. By far the most prevelent problem is noise. This can be extremely irritating to others and distrubs wildlife. How can this be stopped or reduced?

Solution

A. Trailbike use should not be permitted on most, if not all National Forest land.

B. Insure that all trailbikes comply with established noise level regulations.

Problem

2. Trailbike activities interfere with hunting. How can this be stopped?

Solution

Prohibit use of trailbikes during hunting season.

*The data in Table IV reflects information found in the literature review and information received during informal conversations with select district personnel.

Problem

3. Trailbike activities cause soil damage. How can this be stopped?

Solution

Prohibit the use of trailbikes on National Forest lands.

APPENDIX A - TABLE V

PROBLEMS IDENTIFIED BY THREE OR MORE SUBJECT GROUPS	SOLUTIONS PRESENTED	SUBJECT GROUPS Identifying Problems & Solutions			
		District Personnel	Forest Trail Coordinator (Strock)	Trail Riders of Houston (Hardy)	Non-trailbike Users
Trail Maintenance	Cooperative effort between Forest Service & user groups. The bulk of the labor would be provided by user groups, and the Forest Service would provide materials and supplies.	X	X	X	X
Need for Trailhead Facilities	Forest Service should provide two or three of these facilities. User groups should provide assistance in labor intensive phases of construction.	X	X	X	
Enforcement	Concentrate law enforcement efforts during high use periods in major problem areas. Initiate trailbike permit system. Intensify public information services.	X	X		X
PROBLEMS IDENTIFIED BY TWO SUBJECT GROUPS					
Lack of Information	Intensify public information services.	X		X	
Hunter Conflict	Eliminate trailbike use during deer season.			X	X

APPENDIX A - TABLE V (continued)

PROBLEMS IDENTIFIED BY ONE SUBJECT GROUP	SOLUTIONS PRESENTED	SUBJECT GROUPS Identifying Problems & Solutions			
		District Personnel	Forest Trail Coordinator (Strock)	Trail Riders of Houston (Hardy)	Non-trailbike Users
Closure of National Forest System lands to trailbike use	Motorcycle enthusiasts remain highly involved in land management planning process.			X	
Logging Slash in Motorbike Trails	Forest Service require timber sale operators to remove slash from motorbike trails.			X	
Changes in Management Direction	Follow direction established in current approved management plans.	X			
Provide Additional Motorbike Trails	Provide additional motorbike trails through cooperative efforts with user groups. Forest Service will provide materials and supplies, and user groups will provide labor. Needed mileage to be determined.		X		
Impact Monitoring	Use interdisciplinary approach to monitor impacts of motorbike use, possibly through volunteer help from a university.		X		
Noise	Obtain compliance with noise regulations. Restrict riding to designated areas.				X
Soil Damage	Eliminate trailbike use.				X